

ABSTRACT

According to the invention, there is provided null-LOX-1 barley and plant
5 products produced thereof, such as malt manufactured by using barley kernels
defective in synthesis of the fatty acid-converting enzyme lipoxygenase-1. Said
enzyme accounts for the principal activity related to conversion of linoleic acid into
9-hydroperoxy octadecadienoic acid, a lipoxygenase pathway metabolite, which –
through further enzymatic or spontaneous reactions – may lead to the appearance
10 of *trans*-2-nonenal. The invention enables brewers to produce a beer devoid of
detectable *trans*-2-nonenal-specific off-flavors, even after prolonged storage of the
beverage.